

Ply-Guard AS (EPL)

Technical Bulletin

Ply-Guard AS (EPL) is an extended pot life, two-component polyaspartic (aliphatic polyurea) coating system, which allows the installer additional time to work with the material. It exhibits superior color and gloss retention, excellent abrasion resistance, good flexibility, and can be applied directly to properly prepared concrete or metal surfaces. In addition, Ply-Guard AS (EPL) has very good corrosion, chemical, and UV resistance, and can achieve a uniform coating thickness of 2-8 mils DFT per coat that is free of bubbles and pinholes.

Key Features

- Extended curing (70 minutes @ 77°F / 25°C)
- Low-Temperature cure (as low as -30°F / -34°C)
- Recoat time: 90 minutes
- Walk-on Time: 2-3 hours
- Self-priming, excellent penetrating and bond strength
- Excellent abrasion, impact, and wear resistance
- Excellent color and gloss retention
- UV-resistant; optical clarity of clear sealer/finish
- Can add micro media agents to improve slip reduction
- VOC compliant or HAPS free
- Meets FDA/CFSAN, US Food Code, Physical Facilities criteria as outlined in 6.101.11 Surface Characteristics USDA acceptable
- Excellent resistance to chemicals and stains
- Skydrol resistant
- Random/incidental heat contact: tolerant to 300°F
- Low solvent odor
- Excellent Direct-To-Metal (DTM) coating – Passing 2,000 hours testing in salt-fog corrosion chamber (ASTM B117)
- Exceptional corrosion performance as a topcoat over Polyset WB HRZS® Primer on steel surfaces – Passing 13,000 hours in salt-fog corrosion chamber (ASTM B117)

Uses

Concrete Surfaces

- Commercial/Industrial Flooring - Three-coat system consisting of self-priming color primer/sealer followed by clear “bed” coat for accepting and wetting decorative flake chips (or other decorative media), followed by clear sealer/finish coat
- Final clear sealer/finish over decorative concrete surfaces such as acid, color or dye stained, semi-polished concrete, polymer-modified cementitious overlays, or seamless multi-build epoxy/color quartz flooring
- High foot traffic and vehicle/material-handling equipment areas
- UV-resistant sealer/finish coat over safety surfacing systems, outdoor running tracks, swimming pools, and patios

Steel surfaces

- Storage tanks
- Bridges
- Marine (ships, offshore rigs, barges, etc.)
- Railcars
- Pipelines

Surface Preparation

Concrete: Recommended surface profile is SP-2, Reference ICRI Technical Guideline No. 03732. This is best achieved with mechanical grinding machines using diamond heads achieving a final 50 to 120-grit profile.

Direct-To-Metal: All steel surfaces should be prepared to SSPC-SP10, Near-White finish with a minimum of 1.0 mil profile.

Please consult your Polyset Technical Representative for further recommendations

Mix Ratio

Parts by Volume: 1.0 part Base : 1.0 part Catalyst

Product Data (All readings taken at 77°F / 25°C, unless noted)

VOC Content (Lbs./gal.): 1.8

VOC Content (grams/Liter): 216
Also available in a Zero VOC formula

Flash Point: 102°F

Type of Material: Polyaspartic (Aliphatic Polyurea)

Color: Available in all Standard Colors

Finish: Gloss, Semi-Gloss, and Satin

Volume Solids (%): 72

Theoretical Estimated Coverage (ft²/gal.): 1155 @ 1 mil DFT

Recommended Film Thickness (mils/coat): 2–8 mils DFT

Method of Application: Spray, Brush, or Roll

Thinner & Clean-Up Solvent: Xylene or MEK

Pot Life: Approximately 60 minutes @ 77°F / 25°C

Drying Time 70 minutes @ 77°F / 25°C & 50% RH
Increased film thickness will take longer. Do not exceed 48 hours between coats.

Shelf Life: 1 year in the original. unopened containers

Storage: Store between 40–100°F
Store in a dry, covered area away from direct sunlight.

**FOR ADDITIONAL APPLICATION & EQUIPMENT RECOMMENDATIONS,
PLEASE CONSULT YOUR POLYSET TECHNICAL REPRESENTATIVE.**

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